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After review of the air emission license renewal application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

# I. <u>REGISTRATION</u>

#### A. Introduction

Pride Manufacturing Company, LLC (Pride) of Burnham, Maine has applied to renew their Air Emission License, permitting the operation of emission sources associated with their wood products facility.

## B. Emission Equipment

Pride is authorized to operate the following air emission units:

## **Fuel Burning Equipment**

<u>Equi</u>	pment	Date of Const.	Maximum Capacity (MMBtu/hr)	Fuel Type, % sulfur	Maximum Firing Rate	Post Combustion Ctrl Eqpmnt	Stack #
Boi	ler 1	1972	20.9	#2 oil, 0.25	140 gal/hr	none	1
Boi	ler 2	1972	20.9	wood	*2,639 lb/hr	cyclone	2

<sup>\*</sup> based on 7,920 Btu per pound wood

# C. Application Classification

The application for Pride does not include the licensing of increased emissions or the installation of new or modified equipment, therefore the license is considered to be a renewal of current licensed emission units only.

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# II. BEST PRACTICAL TREATMENT (BPT)

#### A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent best practical treatment (BPT), as defined in Chapter 100 of the Air Regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

#### B. Boiler 1

Boiler 1 was manufactured in 1972 and has a maximum design heat input capacity of 20.9 MMBtu/hr firing #2 fuel oil. Boiler 1 is therefore not subject to EPA New Source Performance Standards (NSPS) Subpart Dc, for boilers with a heat input of 10 MMBtu/hr or greater and manufactured after June 9, 1989.

BPT for Boiler 1 is the following:

- Use of 0.25% sulfur (maximum) #2 fuel oil.
- Emission rates for PM are regulated by MEDEP Regulations, Chapter 103, however BPT is more stringent.
- SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC emission rates are based on AP-42 data dated 10/96 for wood fired boilers smaller than 100 MMBtu/hr.
- Visible emissions from the stack serving Boiler 1 shall not exceed 30% opacity on a six (6) minute block average basis.

#### C. Boiler 2

Boiler 2 was manufactured in 1972 and has a maximum design heat input capacity of 20.9 MMBtu/hr firing wood. Boiler 2 is therefore not subject to EPA New Source Performance Standards (NSPS) Subpart Dc, for boilers with a heat input of 10 MMBtu/hr or greater and manufactured after June 9, 1989.

BPT for Boiler 2 is the following:

- Use of a cyclone to reduce particulate matter emissions.
- Emission rates for PM are regulated by MEDEP Regulations, Chapter 103, however BPT is more stringent.

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- SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC emission rates are based on AP-42 data dated 10/96 for wood fired boilers smaller than 100 MMBtu/hr.
- Visible emissions from the stack serving Boiler 2 shall not exceed 30% opacity on a six (6) minute block average basis.

# D. Wood handling

The debarker and sawmill are serviced by two cyclones. One vents through the roof and the other through the wall. Wood waste from the sawmill is either collected in trailers and sold or used for fuel in the boiler.

The utilization of the cyclones for the debarker and sawmill areas represents BPT for control of particulate matter for both locations of this facility. The use of baghouses for particulate collection from other wood processing activities represents BPT.

Visible emissions from <u>baghouses</u> shall not exceed an opacity of 10 percent on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. The facility shall take corrective action if visible emissions from the baghouses exceed five (5) percent opacity.

Visible emissions from any general process source, including <u>cyclones</u>, shall not exceed an opacity of 20% on a 6 minute block average basis, except for no more than one (1) six minute block average in a 1-hour period.

## E. Wood drying kilns

Pride operates six kilns for drying hardwood lumber. Heat for the kilns is provided by Boiler 1 or Boiler 2. A summary of BPT for the drying kilns is the following:

- 1. Pride shall not exceed a combined yearly throughput in the kilns of 8.5 million board feet based on a 12-month rolling total.
- 2. Pride shall keep monthly records of board feet processed.

#### F. Wood finishing

There are three types of painting or coating processes used at Pride:

First, there are nine large paint tumblers used for both water-based and solvent-based paints. These tumblers are each vented directly to the roof with a twelve inch diameter duct.

Second, there are three smaller paint tumblers used for water-based paints only and each vented directly to the roof through a six inch diameter duct.

Third, there are twelve wobble drums that mix paint and wooden pieces together in plastic bags. This process is a source of fugitive emissions during paint addition to the bag and again when the bags are loaded into dryers.

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Twenty one drawer style paint dryers are used to cure the paint from this process. Each unit (six drawers per unit) is vented to the outside through a six inch duct.

BPT for all wood painting and finishing processes shall be the use of water-based coatings when feasible. In addition, Pride currently uses paint pre-heaters to allow the coatings to flow more easily and use less mineral spirits. All solvent-based coating storage containers shall remain closed at all times with air-tight lids when not in use to reduce fugitive VOC and HAP emissions.

VOC emissions from all finishing processes is limited 39.9 ton/yr (12 month rolling total). Use of VOC emitting chemicals shall be documented in a monthly log to be kept on site at all times. Records shall include the number of gallons used and the VOC content of each finish (lb. VOC/gallon).

HAP emissions from all finishing processes is limited 5.0 ton/yr (12 month rolling total). Use of HAP emitting chemicals shall be documented in a monthly log to be kept on site at all times. Records shall include the number of gallons used and the HAP content of each finish (lb. HAP/gallon).

Visible emissions from wood finishing shall not exceed an opacity of 20% on a 6 minute block average basis, except for no more than 1 six minute block average in a 1 hour period.

## G. Metal working

There are 11 grinding stations where metal shaping and cutting equipment is serviced by Pride.

The use of cyclones represents BPT for all grinding, shaping, cutting and filing operations within the Grinding and Filing rooms.

Visible emissions from metal working shall not exceed an opacity of 20% on a 6 minute block average basis, except for no more than 1 six minute block average in a 1 hour period.

## H. Facility Emissions and Fuel Use Caps

The following total licensed annual emissions for Pride are based on the following fuel used. All usages are based on a 12 month rolling total.

- 204,000 gallons per year of #2 fuel (0.25%S maximum by weight) in Boiler 1.
- 7,500 tons/year of wood (7,920 Btu/lb, 12% moisture), or equivalent, in Boiler 2.
- 8.5 million board feet of hardwood lumber.
- 39.9 Tons per year of VOC from the finishing process.
- 5.0 Tons per year of HAP from the finishing process.

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# Total Annual Emissions for the Facility (used to calculate the annual license fee)

<u>Pollutant</u>	<u>TPY</u>
PM	23.6
$PM_{10}$	23.6
$SO_2$	5.1
$NO_X$	34.8
CO	36.2
VOC	47.6
Total HAP	5.0

# III. AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a renewal source shall be determined on a case-by-case basis. Based on the above total facility emissions, Pride is below the emissions level required for modeling and monitoring.

#### **ORDER**

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-306-71-H-A/R, subject to the following conditions:

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (Title 38 MRSA §347-C).

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- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115.
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both.
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request.
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 MRSA §353.
- (6) The license does not convey any property rights of any sort, or any exclusive privilege.
- (7) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions.
- (8) The licensee shall maintain sufficient records, to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request.
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a license or amendment shall not stay any condition of the license.
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license.

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- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
  - a. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
    - 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
    - 2. pursuant to any other requirement of this license to perform stack testing.
  - b. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
  - c. submit a written report to the Department within thirty (30) days from date of test completion.
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
  - a. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
  - b. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
  - c. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

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- (13) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation.
- (15) Upon the written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use, and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.

## (16) **Boiler 1**

- A. Fuel use in Boiler 1 shall not exceed 204,000 gallons per year (12 month rolling total) of #2 fuel oil, with a maximum sulfur content of 0.25% by weight. Compliance is based on fuel receipts from the supplier documenting the quantity delivered and the sulfur content.
- B. Emissions from Boiler 1 shall not exceed the following:

Boiler 1

<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>lb/hr</u>
PM	0.20	4.18
$PM_{10}$	n/a	4.18
$SO_2$	n/a	5.26
$NO_X$	n/a	8.36
CO	n/a	0.75
VOC	n/a	0.03

C. Visible emissions from the stack serving Boiler 1 (Stack #1) shall not exceed an opacity of 30 percent on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3-hour period.

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## (17) **Boiler 2**

- A. Fuel use shall not exceed 7,500 ton/yr of wood waste at 15% moisture or equivalent (12 month rolling total). Fuel records, including amount of fuel fired shall be maintained on a monthly basis, in addition to the 12 month rolling total.
- B. Pride shall continuously use the cyclone to control particulate matter when operating Boiler #2.
- C. Emissions from Boiler 2 shall not exceed the following:

<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>lb/hr</u>
PM	0.35	7.32
$PM_{10}$	n/a	7.32
$SO_2$	n/a	0.52
$NO_X$	n/a	10.24
CO	n/a	12.54
VOC	n/a	0.79

**Boiler 2** 

D. Visible emissions from the stack serving Boiler 2 (Stack #2) shall not exceed an opacity of 30 percent on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3-hour period.

## (18) **Kilns**

- A. Pride shall not exceed a combined yearly throughput in the kilns of 8.5 million board feet based on a 12-month rolling total.
- B. Pride shall keep monthly records of board feet processed.

#### (19) General Process Sources

Visible emissions from any general process source, including cyclones, metal working and finishing operations, shall not exceed an opacity of 20% on a 6 minute block average basis, except for no more than 1 six minute block average in a 1 hour period.

## (20) **Baghouses**

Visible emissions from baghouses shall not exceed an opacity of 10 percent on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. The facility shall take corrective action if visible emissions from the baghouses exceed five (5) percent opacity.

# (21) **Finishing Processes**

- A. Pride shall use water-based coatings when feasible.
- B. Pride shall use paint pre-heaters to allow the coatings to flow more easily.

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- C. All solvent-based coating storage containers shall remain closed at all times with air-tight lids when not in use to reduce fugitive VOC and HAP emissions.
- D. VOC emissions from all finishing processes shall not exceed 39.9 ton/yr (12 month rolling total). Use of VOC emitting chemicals shall be documented in a monthly log to be kept on site at all times. Records shall include the number of gallons used and the VOC content of each finish (pound VOC/gallon).
- E. HAP emissions from all finishing process shall not exceed 5.0 ton/yr (12 month rolling total). Use of HAP emitting chemicals shall be documented in a monthly log to be kept on site at all times. Records shall include the number of gallons used and the HAP content of each finish (pound HAP/gallon).
- (22) Pride shall notify the Department within 48 hours and submit a report to the Department on a <u>quarterly basis</u> if a malfunction or breakdown in any component causes a violation of any emission standard (Title 38 MRSA §605-C).

## (23) A. Annual Emission Statement

In accordance with MEDEP Chapter 137, the licensee shall annually report by September 1, to the Department, the information necessary to accurately update the State's emission inventory by means of:

1) A computer program and accompanying instructions supplied by the Department;

or

2) A written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator Maine DEP Bureau of Air Quality 17 State House Station Augusta, ME 04333-0017

Phone: (207) 287-2437

## **B.** Biennial Emission Statement

In accordance with MEDEP Chapter 137, the licensee shall report September 1, every two years (2002, 2004, etc.) to the Department, the information necessary to accurately update the State's toxic air pollutants emission inventory by means of a written emission statement containing the information required in MEDEP Chapter 137.

Waldo Burnh	Manufacturing Company, LLC o County nam, Maine -71-H-A/R	) ) ) 11	Departmental Finding of Fact and O Air Emission Licens Amendment/Renew	se
	Reports and questions on the Air directed to:	Toxics en	nissions inventory portion s	should be
	Attn: Toxics	s Inventory	y Coordinator	
	Maine DEP Bureau of Air	Ouglity		
	17 State Hous	-		
	Augusta, ME		)17	
	Phone: (207)	287-2437		
(24)	Pride shall pay the annual air emission of each year. Pursuant to 38 MRSA stated timeframe is sufficient group MRSA §341-D, subsection 3.	A §353-A,	failure to pay this annual t	fee in the
(25)	The term of this order shall be for five	ve (5) year	rs from the signature date be	elow.
DONE	AND DATED IN AUGUSTA, MAINE	THIS	DAY OF	2002.
DEPA	RTMENT OF ENVIRONMENTAL I	PROTECT	ΓΙΟΝ	
BY: _				
	MARTHA G. KIRKPATRICK,	COMMIS	SIONER	
	PLEASE NOTE THE ATTACHED SHEET	Г FOR GUII	DANCE ON APPEAL PROCED	OURES
	f initial receipt of application: Se application acceptance: Oc	-		
Date fi	iled with the Board of Environmental	Protection	1	_
This Or	der prepared by Mark Roberts, Bureau of Air	Quality		